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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/590,797	06/09/2000	Phillips D. Rockwell	ROC0001U	1721

7590

03/18/2003

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EXAMINER

LAM, THANH

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 03/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/590,797

Applicant(s)

Rockwell

Examiner

Thanh Lam

Art Unit

2834



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on Dec. 26, 2002
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4,13-16,21, and 28-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Snyder (pn. 5,378,951).

Snyder discloses a vibrator apparatus comprising: a base; an armature plate resiliently mounted to said base; an armature of magnetically attracted material mounted to said armature plate; a first electromagnet (24) mounted to said base in a spaced apart relationship to said armature; a second electromagnet (26) mounted to said base in a spaced apart relationship to said armature; and a circuit for generating electrical pulses having a first output connected to said first electromagnet and a second output connected to said second electromagnet, said circuit configured for selectively operating the vibration generator in a circular orbital vibratory mode, an elliptical vibratory mode (col. 1, lines 19-26) and a reciprocating vibratory mode (see Abstract line 7).

Regarding claim 2, wherein said circuit is configured to deliver electrical pulses to said first electromagnet and said second electromagnet at a variable frequency.

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Regarding claim 3, wherein said circuit is configured to deliver electrical pulses to said first electromagnet and said second electromagnet at a variable phase angle.

Regarding claim 4, wherein said circuit is configured to deliver electrical pulses to said first electromagnet and said second electromagnet with a variable duty cycle.

Regarding claim 12, wherein said circuit comprises a source of electrical pulses at a source frequency and a frequency divider for reducing the source frequency to a desired operating frequency and a pulse counter for selectively delivering the electrical pulses to said first electromagnet and said second electromagnet at a selected phase angle.

Regarding claims 13, 27 and 31, wherein said circuit comprises a mode selector switch for selectively operating the vibration generator in a circular orbital vibratory mode, an elliptical vibratory mode and a reciprocating vibratory mode (fig. 11 of mode selector switch).

Regarding claim 14, wherein said armature comprises a first armature bar and a second armature bar, said first electromagnet being mounted in a spaced apart relationship to said first armature bar, and said second electromagnet being mounted in a spaced apart relationship to said second armature bar.

Regarding claim 15, wherein said first electromagnet is mounted at approximately a right angle to said second electromagnet.

Regarding claim 16, wherein said armature plate is resiliently mounted to said base by a multiplicity of flexural spring elements.

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Regarding claim 21, wherein said armature plate is resiliently mounted to said base by an adjustable rate spring element.

Regarding claim 22, Synder discloses a vibrator apparatus comprising: a base; an armature plate resiliently mounted to said base; an armature of magnetically attracted material mounted to said armature plate; a plurality of electromagnets, including a first electromagnet (24) and a second electromagnet (26), said first electromagnet mounted to said base in a spaced apart relationship to said armature, and said second electromagnet mounted to said base in a spaced apart relationship to said armature; and a source of alternating current (AC power supply) connected to said first electromagnet and to an input of a phase shifting circuit (abs lines 9-12), an output of the phase shifting circuit being connected to said second electromagnet.

Regarding claim 29, further comprising means for varying said first amplitude and said second amplitude.

Regarding claim 30, wherein said source of alternating current is configured to deliver alternating current to said first electromagnet at a variable phase angle with respect to said second electromagnet.

Regarding claim 32, said phase shifting circuit is configured to deliver electrical pulses to said first electromagnet and said second electromagnet at a variable phase shift angle.

Regarding claim 33, Synder discloses a vibrator apparatus comprising: a base; an armature plate resiliently mounted to said base; an armature of magnetically attracted material mounted to said armature plate; a first electromagnet (24) mounted to said base in a spaced apart

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relationship to said armature; a second electromagnet (26) mounted to said base in a spaced apart relationship to said armature; and a circuit for generating electrical pulses having a first output connected to said first electromagnet and a second output connected to said second electromagnet, said circuit configured to deliver electrical pulses to said second electromagnet at a variable phase angle (see abs lines 10 adjust the frequency) with respect to said first electromagnet, thereby inducing an orbital motion in said armature (fig. 8).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5-11,17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Synder (PN. 5,378,951).

Regarding claims 5-11, Synder discloses every aspect of claimed invention except for the circuit is configured for connection to a source of alternating current and wherein said circuit comprises a frequency doubler for doubling a frequency of the alternating current a frequency

Synder discloses the circuit for controlling /adjusting frequencies of the AC power source (fig. 8). Therefore; It would have been obvious to one of ordinary skill in the art at the time the

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invention was made to adjust the frequencies of the circuit of Synder to a double frequency or a divided frequency or a reducing frequency to accommodate a desired operating frequency.

Regarding claims 17-20, Synder discloses every aspect of claimed invention except for the flexural spring elements or the elements constructed of spring steel or the elements are approximately round in cross section. It would have been an obvious matter of design choice to make the elements with steel or changing the shape of the elements in round shape, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone number for this Group is (703) 305-3431.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0656.


Thanh Lam

March 16, 2003

**NOTIFICATION OF REQUESTED NEW FORMAT FOR AMENDMENTS AND/OR RESPONSES FILED
IN ART UNITS 1634, 2827, AND 2834**

The United States Patent and Trademark Office (USPTO) is currently conducting a prototype of electronic application processing and examination in Art Units 1634, 2827, and 2834. To facilitate the prototype, the following changes in format for Amendments and/or Responses filed in those Art Units are requested.

Requested Format of Amendments and Responses during the prototype.

Each section of an Amendment and/or Response (e.g., Claim Amendments, Specification Amendments, Remarks) should begin on a separate sheet to facilitate separate indexing and scanning of the document. *For example*, in an Amendment containing a.) introductory comments, b.) amendments to the claims, c.) amendments to the specification, and d.) remarks, each of these sections should begin on a separate sheet. **For each amendment filed in Art Units 1634, 2827, and 2834, the requirement to provide two sets of claims (a clean version and a marked up version), as set forth in 37 CFR 1.121(c), will be waived where the following format is employed.**

Each amendment that includes a change to an existing claim, or submission of a new claim shall be made by submitting a summary document with the status of all claims and the text of all pending claims as follows:

- (1) The status of all of the claims in the application, including any previously canceled or withdrawn claims, must be summarized in each amendment document. Status is indicated by a parenthetical expression following the claim number (e.g. (original), (currently amended), (previously amended), (canceled), (withdrawn), or (new)). The text of all pending claims must be submitted each time any claim is amended. Canceled and withdrawn claims may be indicated by only the claim number and status.
- (2) All claims being currently amended must be submitted with markings to indicate the changes that have been made. The changes in any amended claim may be shown by strikethrough (for deleted matter) or underlining (for added matter), or by any equivalent marking system.
- (3) The text of pending claims not being amended must be presented in each amendment document in clean version, i.e., without any markings. Any claim presented in clean version will constitute an assertion that it has not been changed relative to the immediate prior version.
- (4) A claim may be canceled by merely providing an instruction to cancel. Any claims added by amendment must be indicated as (new).
- (5) All of the claims in each amendment paper must be presented in ascending numerical order. Consecutive canceled or withdrawn claims may be aggregated into one statement (e.g. Claims 1 – 5 (canceled)).

Amendments to the specification are performed in the conventional manner (37 CFR 1.121(b)).

Patent Copies

Additionally, applicants and practitioners will no longer be required to provide copies of U.S. Patents and Published U.S. Patent Applications cited in any Information Disclosure Statement (IDS) submitted to the USPTO during the prototype and in applications assigned to the three art units. It is requested that eIDSs be used to file all IDS papers for applications before the prototype Art Units. Similarly, during the prototype, copies of U.S. Patents and Published U.S. Patent Applications cited by an examiner during prosecution of an application will not be provided to applicants in Office actions from these Art Units. These documents are available from the USPTO web site, www.uspto.gov for free download. Cited foreign patents and published applications and non-patent literature will be mailed by conventional processing.

The above requested new format and procedures are applicable during the prototype only to applications assigned to Art Units 1634, 2827, and 2834. Any questions regarding these requirements may be directed to image.processing@uspto.gov or one of the Supervisory Patent Examiners of these Art Units 1634 – Gary.Jones@uspto.gov; 2827 – Dave.Talbott@uspto.gov or 2834 – Nestor.Ramirez@uspto.gov.

Example:

Claims 1-5 (canceled) (Note: consecutive canceled or withdrawn claims may be aggregated)

Claim 6 (withdrawn)

Claim 7 (previously amended): A bucket with a handle.

Claim 8 (currently amended): A bucket with a ~~green~~ blue handle.

Claim 9 (withdrawn)

Claim 10 (original): A bucket with a wooden handle.

Claim 11: (new): A bucket with plastic sides and bottom.



DEC 20 2002

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Dear Patent Business Customer:

The United States Patent and Trademark Office (USPTO) has begun testing the use of image technology to replace paper processing of patent applications. You have the opportunity to be involved with a historic prototype that is testing this electronic processing of patent applications within three art units (1634, 2827 and 2834) and the Office of Initial Patent Examination (OIPE).

What will be tested during the prototype?

In the prototype, the paper document contents of pending applications assigned to the three participating art units will be scanned into electronic image files. All processing and examination will be performed with the resulting electronic files during the prototype.

How will applicants be affected?

The attached information sheet details two process changes:

- Amendments should be submitted in a special format. Specifically, a new complete claim set with changes marked in strikeouts and underlining should be submitted. No clean copy of the amended claims is necessary. Please see the OG Notice of 12/17/02 (<http://www.uspto.gov/web/offices/com/sol/og/2002/week51/patimag.htm>.)
- US patent and US published application references will not be mailed with Office actions. These references are available free of charge on our website.
- Applicants are requested to use eIDS for submission of any IDS. For assistance with eIDS, you may contact the Patent Electronic Business Center (toll free at (866) 217-9197).

What are the official files?

During the prototype, the Office will maintain in a central location the original papers that constitute the official file. Over the next few months, the Office will be taking steps to have the electronic file deemed the official file.

How long will the prototype last?

It is expected that the prototype program will incrementally migrate into a production system, with the goal of eliminating paper patent applications files by early summer.

Want more information or to provide feedback?

For more information on the prototype or to provide feedback, please contact :
Search and Information Resources Administration at image.processing@uspto.gov

Through your participation, USPTO will have an opportunity to test the electronic processing of patent applications and meet its goal of delivering high quality products through implementation of electronic patent processing by the end of 2004. Thank you for your support for this exciting activity and for helping the USPTO achieve its goal of providing better service through e-Government.

Sincerely,

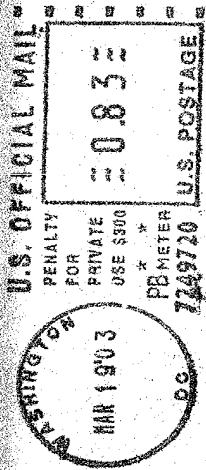
A handwritten signature in dark ink, reading "Nicholas P. Godici".

Nicholas P. Godici
Commissioner for Patents

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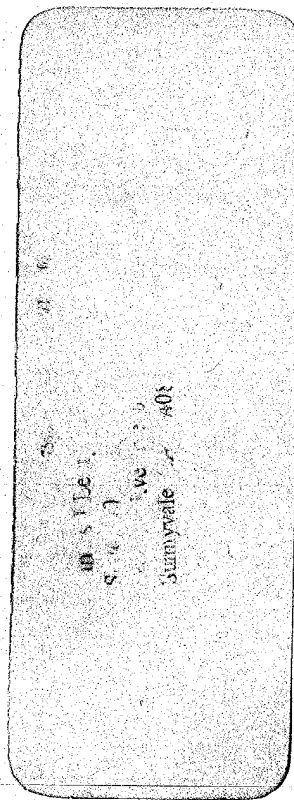
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